


AMENDMENTS TO THE CLAIMS

1-14. (Withdrawn)

15. (Currently Amended) A process ~~for~~ of fabricating ~~an in-plane switching type a~~ liquid crystal display, comprising the steps of which comprises:

 a step of forming a panel of an in-plane switching type liquid display by joining sealing a first substrate and a second substrate together with a sealant, said first substrate including having plural electrodes that include at least a scanning scan signal line, an image signal line, and a pixel plurality of electrodes and a first orientation controlling membrane, and an alignment layer all formed thereon, and a said second substrate including having a color filter, a shading plate light-shielding film and a second orientation controlling membrane alignment layer all formed thereon, with a said sealant being formed at between the two substrates and around the outer edge between peripheries of the substrates and a part thereof reaching ends in such a manner that it partly reaches the edges of the substrates to form an injection inlet opening though which for injecting liquid crystal is to be injected into the space between the sealed substrates;

forming an irregular pattern on either a lower layer of the first orientation controlling membrane, on a lower layer of the second orientation controlling membrane, or on both lower layers;

defining a gap between the first substrate and the second substrate by disposing a spacer, which is smaller than said gap and having a function group on the surface therefore, on said irregular pattern;

bringing said spacer into contact with either the first orientation controlling membrane or the second orientation controlling membrane at a portion other than said irregular pattern; and

a step of setting the disposing said panel in a liquid crystal injector in which injecting unit having therein a container filled with liquid crystal, is disposed;

bringing back a pressure of said evacuating both the liquid crystal injector to injecting unit and the panel, putting the opening of the panel into the liquid crystal in the container, thereafter restoring the liquid crystal injecting unit to have an atmospheric pressure while said injection opening being soaked into liquid crystal in said container, after evacuating air from said liquid crystal injector and said in that condition so that the liquid crystal is injected into the panel; and through its opening owing to the inner pressure difference between the unit and the panel, and finally

sealing said injecting the opening without any external pressure on said of the panel, after filling said panel with liquid crystal through said injection inlet utilizing in such a condition that the panel receives no external pressure difference.

16. (Currently Amended) A process for of fabricating an in-plane switching type a liquid crystal display, comprising the steps of which comprises:

a step of forming a panel of an in-plane switching type liquid display by joining sealing a first substrate and a second substrate together with a sealant, said first substrate including having plural electrodes that include at least a scanning scan signal line, an image signal line, and a pixel plurality of electrodes and a first orientation controlling membrane, and an alignment layer all formed thereon, and a said second substrate including having a color filter, a shading plate light-shielding film and a second orientation controlling membrane alignment layer all formed

thereon, with a said sealant being formed at between the two substrates and around the outer edge between peripheries of the substrates and a part thereof reaching ends in such a manner that it partly reaches the edges of the substrates to form an injection inlet opening though which for injecting liquid crystal is to be injected into the space between the sealed substrates;

forming an irregular pattern on either a lower layer of the first orientation controlling membrane, on a lower layer of the second orientation controlling membrane, or on both lower layers;

defining a gap between the first substrate and the second substrate by disposing a spacer, which is smaller than said gap and having a function group on the surface therefore, on said irregular pattern;

bringing said spacer into contact with either the first orientation controlling membrane or the second orientation controlling membrane at a portion other than said irregular pattern; and

a step of setting the disposing said panel in a liquid crystal injector in which -injecting unit having therein a container filled with liquid crystal, is disposed;

bringing back a pressure of said evacuating both the liquid crystal injector to -injecting unit and the panel, putting the opening of the panel into the liquid crystal in the container, thereafter restoring the liquid crystal injecting unit to have an atmospheric pressure while said injection opening being soaked into liquid crystal in said container, after evacuating air from said liquid crystal injector and said in that condition so that the liquid crystal is injected into the panel; and through its opening owing to the inner pressure difference between the unit and the panel, then keeping the panel as it is until its inner pressure increases

sealing said injecting opening after filling said panel with liquid crystal through said injection inlet utilizing pressure difference and leaving the pressure in said panel coming to be

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D) not less than ~~lower by at most -0.3 kgf/cm² than~~ with respect to the atmospheric pressure, and finally sealing the opening.
